

CLAIMS

1. A radio communication system in which a plurality of transmitters transmit same signals with same frequency band and a receiver receives these signals, characterized in that at 5 least one antenna is provided to each of said transmitters, and arbitrary delay is given (including a case where no delay is given) to the signals to be transmitted from said antennas so that output power which is different from at least one delay output in the other transmitters is set in each of said 10 transmitters.

2. The radio communication system according to claim 1, characterized in that when different delays as the arbitrary delays are given (including a case where no delay is given) 15 respectively to said plurality of antennas in said transmitters, a combination of output powers which is different from corresponding delay outputs in the other transmitters is set in said respective transmitters.

20 3. The radio communication system according to claim 1, characterized in that an equalizer in said receiver demodulates a signal transmitted at least one antenna in each of said transmitters.

4. A radio communication system in which a plurality of transmitters transmit same signals with same frequency band and a receiver receives these signals, characterized in that,

5 at least one antenna is provided to each of said transmitters, and signals which are supplied to said antennas are signals which are obtained by differently delaying modulated signals and carrying out weighting synthesization on them,

10 at least one of delay amount and weighting factor in each of said transmitters is set to a value different from the other transmitters.

5. The radio communication system according to claim 4, characterized in that an equalizer in said receiver demodulates 15 a signal transmitted from at least one antenna in each of said transmitters.

6. A radio communication system in which a transmitter having a plurality of antennas transmits same signals and a receiver receives these signals, characterized in that signals which are supplied to said plurality of antennas are signals which are obtained by differently delaying modulated signals and by carrying out weighting synthesization on them, and at least one of delay amount and weighting factor is set to 25 different values in each of said antennas.

7. The radio communication system according to claim 6, characterized in that an equalizer in said receiver demodulates signals transmitted from said plurality of antennas.

5 8. A transmitter characterized in that in the case where a plurality of transmitters transmit same signals with same frequency band, at least one antenna is provided, and an arbitrary delay (including a case of no delay) is given to said antenna so that an output power which is different from at least 10 one delay output in the other transmitters is set.

9. The transmitter according to claim 8, characterized in that when different delays as the arbitrary delays are given (including a case where no delay is given) to a plurality of 15 antennas, a combination of output powers which is different from corresponding delay outputs in the other transmitters is set.

10. A transmitter characterized in that in the case where a plurality of transmitters transmit same signals with same 20 frequency band, at least one antenna is provided, and signals which are supplied to respective antennas are signals which are obtained by differently delaying modulated signals and by carrying out weighting synthesis on them, and at least one of delay amount and weighting factor is set to a value different 25 from the other transmitters.

11. A transmitter characterized in that in the case where same signals are transmitted from a plurality of antennas, signals which are supplied to said antennas are signals which are obtained by differently delaying modulated signals and by 5 carrying out weighting synthesis on them, and at least one of delay amount and weighting factor is set to different values in said antennas.

12. A receiver characterized by demodulating same signals 10 which are transmitted from a plurality of antennas in a plurality of transmitters.